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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/770,430	01/26/2001	Edward A. Richley	D/96604	7063
7590	12/16/2003		690-009683US(PAR)	
EXAMINER				
NGUYEN, JENNIFER T				
			ART UNIT	PAPER NUMBER
			2674	7

DATE MAILED: 12/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/770,430

Applicant(s)

RICHLEY, EDWARD A.

Examiner

Jennifer T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2001.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This office action is responsive to amendment filed on 09/22/2003.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Engler et al. (U.S. Patent No. 6,383,619).

Regarding claim 1, referring to Figs. 1, 2 and 4, Engler teaches an addressable display device comprising: a light transparent support body (404, 406) containing a plurality of anisotropic particles (412) contained within dielectric liquid-filled cavities (414) having walls having a higher dielectric constant than that of said dielectric fluid (416); a parallel pair of electrical conductors (V+ and V-), one on each surface of said support body (404, 406) and at least one of which is light transparent; each of said anisotropic particles (412) of the support body having dissimilar sections (112, 114) (Fig. 1B) of contrasting optical appearance and electrical conductivity, one section having an anisotropy for inducing a dipole moment which renders said section electrically-responsive; said dielectric liquid having dissolved therein a low concentration of an ionizable charge director material which, under application of an electric field between said electrical conductors (V+, V-), forms clusters of mobile ions of opposite charge and different mobilities which move within said liquid towards the cavity wall adjacent

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the electrical conductor of opposite polarity, said mobile ions inducing said dipole moment and rotating said particles (412) so that the one section thereof faces the electrical conductor of opposite polarity each time the polarity between said conductors is reversed (col. 3, lines 31-50, col. 4, lines 1-19 and col. 8, lines 6-50).

Regarding claim 2, Engler teaches the particles require the application of an electric field of a predetermined magnitude or threshold to the electrodes to cause the particles (412) to release from attraction to one electrode and to rotate and face the other electrode (col. 8, lines 5-50).

Regarding claim 3, referring to Fig. 1B, Engler teaches particles (106) are bichromal balls and said sections are hemispheres (112, 114) (col. 4, lines 1-20).

#### ***Response to Arguments***

4. Applicants' arguments filed 09/22/2001, have been fully considered but they are not persuasive because as follows:

In response to applicants' argument filed "no clear teachings are found in the reference that the walls (416) of the particles (412) have a higher dielectric constant than that of the fluid ... and different mobilities which move within the liquid towards the cavity wall of opposite polarity and induce a dipole moment and rotate the particles ". However, in col. 8, lines 5-65, Engler teaches the walls (416) of the particles (412) have a higher dielectric constant than that of the fluid. In general, the ions of different polarity will have different mobilities, due to differences in their chemical structure. Accordingly, Engler teaches different mobilities which move within the liquid towards the cavity wall of opposite polarity and induce a dipole moment and rotate the particles (col. 3, lines 31-50, col. 4, lines 1-19 and col. 8, lines 6-65). The Applicant also argued that "no disclosure of the application of an electric field of a

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predetermined magnitude". However, Engler teaches the application of a sufficiently strong electric field to oriented distribution of the particles resulted in the particles moving (see col. 3, lines 40-50). Accordingly, Engler teaches the application of an electric field of a predetermined magnitude. Therefore, it is believed that the limitations of claims 1-3 are still met by Engler and the ground of the rejection is maintained.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jennifer T. Nguyen** whose telephone number is **703-305-3225**. The examiner can normally be reached on Mon-Fri from 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reach at **703-305-4709**.

**Any response to this action should be mailed to:**

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Commissioner of Patents and Trademarks

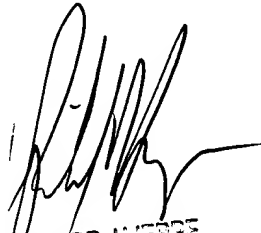
Washington, DC. 20231

**Or faxed to: 703-872-9306 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA, sixth-floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding  
should be directed to the Technology Center 2600 Customer Service Office whose telephone  
number is 703-306-0377.

Jennifer T. Nguyen  
12/08/2003



RICHARD NIERPE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600